

# Should Mothers Avoid Nighttime Breastfeeding to Decrease Their Risk of Depression?

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There is a movement afoot in childbirth education and perinatal health urging mothers to avoid nighttime breastfeeding to decrease their risk for postpartum depression. We know that if mothers follow this advice, it will have a negative impact on breastfeeding. But let's put that issue aside for the moment and consider whether avoiding nighttime breastfeeding will preserve women's mental health by allowing them to get more sleep. In short, is this good advice?

At first glance, it may seem to be. Since breast milk is lower in fat and protein than formula, we might assume, as I once did, that breastfeeding mothers sleep less than their formula-feeding counterparts. When a mother's mental health is at stake, avoiding nighttime breastfeeding might be worth the risk it poses to breastfeeding. However, recent research has revealed the opposite: that breastfeeding mothers actually get more sleep—particularly when the baby was in proximity to the mother. And that has major implications for their mental health. If you want one more good reason for mothers to exclusively breastfeed their babies, here it is:

## Breastfeeding Mothers Get More Sleep

In a study of 33 mothers at 4 weeks postpartum, Quillin and Glenn (2004) found that mothers who were breastfeeding slept more than mothers who were bottle-feeding. Data were collected via questionnaire that recorded 5 days of mother and newborn sleep. When comparing whether bedsharing made a difference in total sleep, they found that bedsharing, breastfeeding mothers got the most sleep and breastfeeding mothers who were not bedsharing got the least amount of sleep. Mothers who were bottle-feeding got the same amount of sleep whether their babies were with them or in another room.

Sleep patterns of 72 couples were compared from pregnancy to the first month postpartum via sleep diaries and wrist actigraphy (Gay et al., 2004). Most of the mothers were at least partially breastfeeding (94%) and 80% were exclusively breastfeeding. Most of the babies slept in their parents' room and 51% regularly slept in their parents' beds. Sleep and fatigue outcomes were not associated with type of birth, parent-infant bedsharing, or baby's age. Mothers who were exclusively breastfeeding had a greater number of nighttime wakings (30 vs. 24) compared with mothers who are not breastfeeding exclusively. The exclusively breastfeeding

mothers slept approximately 20 minutes longer than mothers not exclusively breastfeeding.

In a study of mothers and fathers at three months postpartum, data were collected via wrist actigraphy and sleep diaries (Doan et al., 2007). The study compared sleep of exclusively breastfed infants vs. those supplemented with formula. In this sample, 67% were fed exclusively with breast milk, 23% were fed a combination of breast milk and formula, and 10% were exclusively formula fed. Mothers who exclusively breastfed slept an average of 40 minutes longer than mothers who supplemented. Further, parents of formula-fed infants had more sleep disturbances. They concluded that parents who are supplementing with formula assuming that they are going to get more sleep should be encouraged to breastfeed so they will get an extra 30-45 minutes of sleep per night.

Not only do breastfeeding mothers get more sleep, the sleep they get is better quality. This study compared 12 exclusively breastfeeding women, 12 age-matched control women, and 7 women who were exclusively bottlefeeding (Blyton et al., 2002). They found that total sleep time and REM sleep time were similar in the three groups of women. The marked difference between the groups was in the amount of slow-wave sleep (SWS). The breastfeeding mothers got an average of 182 minutes of SWS. Women in the control group had an average of 86 minutes. And the exclusively bottle-feeding women had an average of 63 minutes. Among the breastfeeding women, there was a compensatory reduction in light, non-REM sleep. Slow-wave sleep is an important marker of sleep quality, and those with a lower percentage of slow-wave sleep report more daytime fatigue and pain.

The most recent study was published in the journal *Sleep*, a major sleep-medicine journal not necessarily known for its support of breastfeeding. This was a study of 2,830 women at 7 weeks postpartum (Dorheim et al., 2009). The researchers found that disrupted sleep was a major risk factor for postpartum depression. But here is where it really gets interesting. When considering what disrupted sleep, they found that the following factors were related to disturbed sleep: depression, previous sleep problems, being a first-time mother, a younger or male infant, and *not exclusively breastfeeding*. In other words, mothers who were not exclusively breastfeeding had more disrupted sleep and a higher risk of depression.



## Conclusions

The results of these previous studies are remarkably consistent. Breastfeeding mothers are less tired and get more sleep than their formula- or mixed-feeding counterparts. And this *lowers* their risk for depression. Doan and colleagues noted the following.

Using supplementation as a coping strategy for minimizing sleep loss can actually be detrimental because of its impact on prolactin hormone production and secretion. Maintenance of breastfeeding, as well as deep restorative sleep stages, may be greatly compromised for new mothers who cope with infant feedings by supplementing in an effort to get more sleep time. (p. 201)

In sum, advising women to avoid nighttime breastfeeding to lessen their risk of depression is not medically sound. In fact, if women follow this advice, it may actually increase their risk of depression.

## References

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